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The Landscape of Unfolding with Machine Learning

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Recent innovations from machine learning allow for data unfolding, without binning and including correlations across many dimensions. We describe a set of known, upgraded, and new methods for ML-based unfolding. The performance of these approaches is evaluated on two benchmark datasets. We find that all techniques are capable of accurately reproducing the particle-level spectra across complex observables. Given that these approaches are conceptually diverse, they offer an exciting toolkit for a new class of measurements that can probe the Standard Model with an unprecedented level of detail and may enable sensitivity to new phenomena.

Track

Unfolding

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